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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,106	04/28/2005	Victor Marten	SEMT.P-023-USNP	5366
21121	7590	12/28/2005	EXAMINER	
OPPEDAHL AND LARSON LLP			PATEL, NITIN	
P O BOX 5068			ART UNIT	PAPER NUMBER
DILLON, CO 80435-5068			2673	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/533,106	MARTEN ET AL.
	Examiner Nitin Patel	Art Unit 2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 April 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1-4,9-11 and 13 is/are allowed.
 6) Claim(s) 5-8 and 12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/28/2005

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: claim 5 consist two a a should be only one a. Appropriate correction is required.

Drawings

2. Figures 2,3,6,9,10,14,15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dotson (U.S. Patent No. 6,753,853) in view of Katabami (U.S. Patent No. 6,373,474).

As per claims 5,12 Dotson shows a method for use with a sensing electrodes of a human input touch pad, the step having applying a first potential to the sensing

electrode and applying a second potential to the sampling logic circuit (In col.15 lines 35-67) and paralleling the sensing electrodes and the sampling logic circuit (in fig.3 sw 22 and 23 and logic circuit element 106 and in col.16 lines 1-45) and measuring a potential at the sampling circuit (in col.16 lines 13-24).

Dotson does not show a capacitor to do the sensing sampling in a touch area.

In the same field of endeavor Katabami shows a capacitor (In fig.2 element 39 and In col.10 lines 20-35). It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to have combined the teaching of a capacitor in a touch display of Katabami's with touch display of Dotson circuitry because it would have obtained the grounding effect of human body unconditionally so the signal current flown between a finger and a touch panel is set at certain frequency.

As per claim 6, Dotson shows a single pole double throw switch (In fig.3 SW0-SW22).

As per claim 7, Dotson shows the first potential is ground (In fig.3 element Vss is a ground terminal).

As per claim 8, Dotson shows the second potential is a positive voltage (In fig.3 Vdd voltage which is positive voltage).

Allowable Subject Matter

4. Claims 1-4,9,10,11,13 are allowed.

The prior art fails to teach or suggest an apparatus for use with a first number of sensing electrodes of a human input touch pad having a sampling capacitor having first and second leads; potential measurement means electrically connected with the

sampling capacitor; a multiplexer; the multiplexer comprising a first switching stage having fewer in number than the first number and comprising more than one switch, the switches having first ends electrically connected with the first lead of the sampling capacitor; a second switching stage comprising groups of switches each group corresponding to a respective second end of a switch in the first stage, each group having more than one switch, the switches in each group having first ends electrically connected with the respective second end; a third switching stage having groups of switches, each group corresponding to a respective second end of a switch in the second switching stage, each group having more than one switch the switches in each group having first ends electrically connected with the respective second end; each switch in the third switching stage having a second end electrically connected with one of the sensing electrodes as claimed in claims above allowed claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nitin Patel
Examiner
Art Unit 2673

